

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A method for responding to a request for a web page, comprising:

- determining whether to respond to a request for a web page by retrieving the web page from a cache or by constructing the web page; ~~and~~
- if it is determined that the request is to be responded to by constructing the web page, determining that the web page is to be cached, wherein the web page references other objects;
- storing the referenced objects in one or more data stores; and
- caching the web page in the cache;
- if it is determined that the request is to be responded to by retrieving the web page from the cache, retrieving the web page from the cache;
- automatically managing the cached web page and the referenced objects to ensure the display of a complete web page; and
- when one or more of the referenced objects is deleted, deleting the web page from the cache.

2. (canceled).

3. (original): The method of claim 1, further comprising, when the web page is deleted from the cache, deleting the referenced objects.

4. (previously presented): The method of claim 1, further comprising, prior to determining that the web page is to be cached:

retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

5. (original): The method of claim 4, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data based on administrator-provided input; and

deleting the retrieved data based on the administrator-provided input.

6. (original): The method of claim 4, wherein managing the cached data comprises the steps of:

receiving a request from an administrator to delete the linked objects based on an administrator-provided input; and

deleting the linked objects based on the administrator-provided input.

7. (original): The method of claim 1, further comprising, processing a caching directive that specifies whether the web page should be cached.

8. (original): The method of claim 1, further comprising, associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

9. (original): The method of claim 8, wherein managing the cached web page and referenced objects further comprises automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

10. (original): The method of claim 9, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

11. (original): The method of claim 8, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria; and

deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

12. (original): The method of claim 11, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

13. (currently amended): An apparatus for processing a request that requires the dynamic generation of a web page, the apparatus comprising:

a computer; and

one or more programs, performed by the computer, for:

determining whether to respond to a request for a web page by retrieving the web page from a cache or by constructing the web page;

if it is determined that the request is to be responded to by constructing the web page,

determining that the web page is to be cached, wherein the web page references other objects;

storing the referenced objects in one or more data stores; and

caching the web page in the cache;

if it is determined that the request is to be responded to by retrieving the web page from the cache, retrieving the web page from the cache;

automatically managing the cached web page and the referenced objects to ensure the display of a complete web page; and

when one or more of the referenced objects is deleted, deleting the web page from the cache.

14. (canceled).

15. (original): The apparatus of claim 13, further comprising, when the web page is deleted from the cache, deleting the referenced objects.

16. (previously presented): The apparatus of claim 13, further comprising, prior to determining that a web page is to be cached, one or more computer programs, performed by the computer, for retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

17. (original): The apparatus of claim 16, wherein managing the cached data comprises one or more computer programs, performed by the computer, for receiving a request from an administrator to delete the retrieved data based on an administrator-provided input, and deleting the retrieved data based on the administrator-provided input.

18. (original): The apparatus of claim 16, wherein managing the cached data comprises one or more computer programs, performed by the computer, for receiving a request from an

administrator to delete the linked objects based on a second user provided input, and deleting the linked objects based on the administrator-provided input.

19. (original): The apparatus of claim 13, further comprising one or more computer programs, performed by the computer, for processing a caching directive that specifies whether the web page should be cached.

20. (original): The apparatus of claim 13, further comprising one or more computer programs, performed by the computer, for associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

21. (original): The apparatus of claim 20, wherein managing the cached web page and referenced objects further comprises one or more computer programs, performed by the computer, for automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

22. (original): The apparatus of claim 21, wherein deleting further comprises one or more computer programs, performed by the computer, for first, deleting the web page and second, deleting the referenced objects.

23. (previously presented): The apparatus of claim 20, wherein managing the web page and referenced objects comprises one or more computer programs, performed by the computer, for receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria, and deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

24. (original): The apparatus of claim 23, wherein deleting further comprises one or more computer programs, performed by the computer, for first, deleting the web page and second, deleting the referenced objects.

25. (currently amended): An article of manufacture comprising a computer program carrier readable by a computer and embodying one or more instructions executable by the computer to perform method steps for responding to a request for a web page, comprising:

determining whether to respond to a request for a web page by retrieving the web page from a cache or by constructing the web page; and

if it is determined that the request is to be responded to by constructing the web page,

determining that the web page is to be cached, wherein the web page references other objects;

storing the referenced objects in one or more data stores; and

caching the web page in the cache;

if it is determined that the request is to be responded to by retrieving the web page from the cache, retrieving the web page from the cache;

automatically managing the cached web page and the referenced objects to ensure the display of a complete web page; and

when one or more of the referenced objects is deleted, deleting the web page from the cache.

26. (canceled).

27. (original): The article of manufacture of claim 25, further comprising, when the web page is deleted, deleting the referenced objects.

28. (previously presented): The article of manufacture of claim 25, further comprising, prior to determining that a web page is to be cached:

retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

29. (original): The article of manufacture of claim 28, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data based on an administrator-provided input; and



deleting the retrieved data based on the administrator-provided input.

30. (original): The article of manufacture of claim 28, wherein managing the web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the linked objects based on an administrator-provided input; and

deleting the linked objects based on the administrator-provided input.

31. (original): The article of manufacture of claim 25, further comprising processing a caching directive that specifies whether the web page should be cached.

32. (original): The article of manufacture of claim 25, further comprising associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

33. (original): The article of manufacture of claim 32, wherein managing the cached web page and referenced objects further comprises automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

34. (original): The article of manufacture of claim 33, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

35. (original): The article of manufacture of claim 32, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria; and

deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

36. (original): The article of manufacture of claim 35, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

37. (previously presented): The method of claim 1, wherein at least one of the referenced objects is not stored in said cache.

38. (previously presented): The apparatus of claim 13, wherein at least one of the referenced objects is not stored in said cache.

39. (previously presented): The article of manufacture of claim 25, wherein at least one of the referenced objects is not stored in said cache.

40. (previously presented): The method according to claim 1, wherein the cached web page and the referenced objects are automatically managed ensuring the display of a complete web page by referencing a dependency table storing relation information for the cached web page and the referenced objects.

41. (new): The method of claim 1, wherein caching directives are used in determining whether to cache the constructed web page.

42. (new): The method of claim 1, wherein it is determined that the request is to be responded to by retrieving the web page from the cache when the request matches a cache key.

43. (new): The method of claim 41, wherein a system initialization file comprises at least one caching directive.

44. (new): The method of claim 42, wherein the cache key comprises path information, a macro name, an HTML or XML block name, and a query string that caused the web page to be generated.

45. (new): The method of claim 43, where the at least one caching directive comprises at least one line of computer-readable code.

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appl. No. 09/602,412  
Attorney Docket No.: A8492

46. (new): The method of claim 44, wherein the cache key further comprises the form data that caused the web page to be generated.

47. (new): The method of claim 1, wherein web server software generates the web page when it is determined that the request is to be responded to by constructing the web page.